MAY 0 6 2002

Sheet _ 1_ of _ 3 **FORM PTO-1449** Patent and Trademark Office Attorney's Docket No. Serial No. (REV. 6-89) 21153-05927 10/020,558 INFORMATION DISCLOSURE CITATION Applicants Sol P. DiJaili et al. (Use several sheets if necessary) Filing Date Group Art Unit December 14, 2001 -2811 2828 **U.S. PATENT DOCUMENTS** Examiner Initial **Document Number** Name Class Subclass Filing Date If <u>Appropriate</u> D1 Α 6,335,992 01-01-02 Bala et al. 385 17 02-15-00 В 6,333,799 12-25-01 Bala et al. 359 128 01-06-98 C 6,317,531 11-13-01 Chen et al. 385 17 D 6,128,115 10-03-00 Shiragaki 359 128 Ē 6,115,517 09-05-00 Shiragaki et al. 385 24 F 6,061,156 05-09-00 Takeshita et al. 359 117 G 5,999,293 12-07-99 Manning 359 139 Н 5,771,320 06-23-98 Stone 385 16 5,436,759 07-27-95 Dijaili et al. 359 333 5,305,412 04-19-94 Paoli 385 122 Κ 5,299,054 03-29-94 Geiger 359 251 4,794,346 12-27-88 Miller 330 4.3 M 3,828,231 08-06-74 Yamamoto 357 30 3,467,906 09-16-69 Cornely et al. 330 4.3 **FOREIGN PATENT DOCUMENTS Document Number** Date Country Translation Class Subclass 56006492 01-23-81 Japan H01S 3/18 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Alcatel, "Alcatel Optronics Introduces a Gain-Clamped Semiconductor Optical Amplifier," Press Release for Immediate Publication, OFC '98, San Jose, 1 unnumbered page, (Feb. 1998).

Diez, S., Ludwig, R., and Weber, H.G., "All-Optical Switch for TDM and WDM/TDM Systems Demonstrated in a 640 Gbit/s Demultiplexing Experiment," Electronics Letters, Vol. 34, No. 8, Pgs. 803-805, April 16, 1988. Diez, S., Ludwig, R., and Weber, H.G., Gain-Transparent SOA-Switch for High-Bitrate OTDM Add/Drop Multiplexing," IEEE Photonics Technology Letters, Vol. 11, No. 1, Pgs. 60-62, January 1999. Diez, S., Ludwig, R., Patzak, E., and Weber, H.G., "Novel Gain-Transparent SOA-Switch for High Bitrate QTDM Add/Drop Multiplexing," ECOC'98, Vol. 1, Pages 461-462, September 1998. EXAMINER

DATE CONSIDERED EXAMINER: Initial If referenges considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. include copy of this form with next communication to applicant.

MAY 0 6 2002

Sheet <u>2</u> of <u>3</u>

(REV. 6-89)		Page No. 1 Page	Attomey's Docket No. 21153-05927	Serial No. 10/020,558			
IN	FOR	MATION DISCLOSURE CITATION	Applicants	10/020,000			
		Aller and the second second	Sol P. DiJaili et al.				
(Use several sheets if necessary)			Filing Date December 14, 2001	Group Art Unit 2811			
	TT	THER DOCUMENTS (Continued) (Includin	ng Author, Title, Date, Pertinent	Pages, Etc.)			
pn.		Dorgeuille, F., Noirie, L., Faure, J-P., Ambrosy, A Artigue, C., "1.28 Tbit/s Throughput 8x8 Optical Semiconductor Optical Amplifier Gates," Optical Pages 221-223, March 2000.	A., Rabaron, S., Boubal, F., S Switch Based on Arrays of G Fiber Communication Confer	chilling, M., and ain-Clamped ence, Vol. 4,			
	V	Dorgeuille, F., Lavigne, B., Emery, J.Y., Di Magg Baucknecht, R., Schneibel, H.P., Graf, C., and M WDM Routing and Switching Applications," OFC	lelchior, H., "Fast Optical Am '98 Technical Dinest, Pages	plifier Gate Array for			
	v	Leclerc, D., "Clamped Gain Travelling Wave Semiconductor Optical Amplifier for Wavelength Division Multiplexing Application," IEEE, US, Vol. Conf. 14, Pages 185-186, New York, September 14, 1994					
<u>.</u>		Amplifiers," IEEE, Journal on Selected Areas in C August 1988.	nic Switching Modules Desig Communications, Vol. 6, No. 7	ned with Laser Diode 7, Pages 1087-1095,			
	×	Jacquet, J., Derouin, E., and Garabedian, P., "Fast (300 ps) Polarization Insensitive Semiconductor Optical Amplifier Switch with Low Driving Current (70 mA)" Semiconductor Loses Confessor					
-	Y	Conference Digest, 13th IEEE International, Pages 130-131, September 21-25, 1992. Fouquet, J.E., Venkatesh, S., Troll, M., Chen, D., Schiaffino, S., and Barth, P.W., "Compact, Scalable Fiber Optic Cross-Connect Switches," IEEE, 1999 Digest of the LEOS Summer Topical Meetings, Pages 59-60, 1999.					
	Z	Ibrahim, M.M., "Photonic Switch Using Surface-Emitting Laser Diode and APD," 16th National Radio Science Conference, NRSC'99, Pages 1-8, Ain Shams University, Cairo, Egypt, February 23-25, 1999.					
<u> . </u>		Amplifiers," Journal of Lightwave Technology, Vo. 13, No. 4, Pages 598-605, April 1905					
		Optical Amplifiers for Optical Gate Applications," IEEE Journal of Quantum Electronics, Vol. 35, No. 7, Pages 1067-1074, July 1999.					
		Leuthold, J., Besse, P.A., Eckner, J., Gamper, E., Switches with Gain and Principally Ideal Extinction 34, No. 4, Pages 622-633, April 1998.	Ratios," IEEE Journal of Qu	antum Electronics, Vol.			
	D1	McAdams, L.R., Weverka, R.T., and Cloonan, J., 'Amplifiers: Techniques and Performance." LEOS I	Presentation Pages 363-364	1006			
·	E1	Can They Go?," IEEE Lasers and Electro-Optics S Pages 900-901, November 8-11, 1999.	s for All-Optical Signal Proce Society 1999 12th Annual Mee	essing: Just How Fast eting, LEOS'99, Vol. 2,			
	F1	Mutalik, V. G., van den Hoven, G., and Tiemeijer, Semiconductor Optical Amplifiers." OFC '97 Techn	IICAL LIMBEL DAMAC AER AEZ	4007			
V.	61	Panajotov, K., Ryvkin, B., Peeters, M., Verschaffel "Polarisation Switching in Proton-Implanted VCSEI Meetings, Pages 55-56, July 26-30, 1999.	f G Danckaert I Thienno	nt H. Vorotonnineff I			
MINER		DATE COM	ISIDERED 8/9/100				
MINER: Initial ude copy of this	if refere	ndes considered, whether or not citation is in conformance with MPEP § in next communication to applicant.	609; Draw line through citation if not in or	onformance and not considered.			

Sheet 3 of

			<u> </u>		Sheet <u>3</u> of <u>3</u>					
FORM (REV.		1449	U.S. DEPARTMENT OF COMMERCE	Attomey's Docket No.	Serial No.					
INEV.	•		MATION DISCLOSURE CITATION	21153-05927	10/020,558					
	11 V r	OKI		Sol P. DiJaili et al.						
	(Use several sheets if necessary)			Filing Date December 14, 2001	Group Art Unit 2811					
		0	THER DOCUMENTS (Continued) (Including	ng Author, Title, Date, Pertinent	Pages, Etc.)					
Pr) ·	H1	Qui, B.C., Ke, M.L., Kowalski, O.P., Bryce, A.C., and Penty, R.V., "Monolithically Integrated Fabric Quantum Well Intermixing," 2000 International Conference Proceedings, Pages 415-418, May 1	Aitchison, J.S., Marsh, J.H., cation of 2x2 and 4x4 Crossp onference on Indium Phosph 4-18, 2000.	Owen, M., White, I.H., oint Switches Using ide and Related Materials					
	,		Scheuer, J., Arbel, D., and Orenstein, M., "Nonlinear On-Switching of High Spatial Frequency Patterns in Ring Vertical Cavity Surface Emitting Lasers," 1999 IEEE LEOS Annual Meeting Conference Proceedings, 12 th Annual Meeting, IEEE Lasers and Electro-Optics Society 1999 Annual Meeting, Vol. 1, Pages 123-124, November 8-9, 1999.							
		· J1	Soto, H., Erasme, D., and Guekos, G., "All-Optical Switch Demonstration Using a Birefringence Effect in a Semiconductor Optical Amplifier," IEEE CLEO, Pacific Rim '99, Pages 888-889, 1999.							
	•	K1	Soulage, G., Doussière, P., Jourdan, A., and Sotom, M., "Clamped Gain Travelling Wave Semiconductor Optical Amplifier as a Large Dynamic Range Optical Gate," Alcatel Alsthom Recherche, route de Nozay, 91460 Marcoussis (France), 4 unnumbered pages, undated.							
	,		Tai, C., and Way, W.I., "Dynamic Range and Switching Speed Limitations of an N x N Optical Packet Switch Based on Low-Gain Semiconductor Optical Amplifiers," IEEE Journal of Lightwave Technology, Vol. 14, No. 4, Pages 525-533, April 4, 1996.							
	•	M1	Tiemeijer, L.F., Walczyk, S., Verboven, A.J.M., va Binsma, J.J.M., and Jansen, E.J., "High-Gain 13." Built-in Amplified Signal Monitor for Optical Gain No. 3, Pages 309-311, March 1997.	0 nm Semiconductor Optical	Amplifier Modules with a					
	·		Toptchiyski, G., Kindt, S., and Petermann, K., "Time-Domain Modeling of Semiconductor Optical Amplifiers for OTDM Applications," IEEE Journal of Lightwave Technology, Vol. 17, No. 12, Pages 2577-2583, December 1999.							
	,		Tiemeijer, L.F., Thijs, P.J.A., Dongen, T.v., Binsm "Reduced Intermodulation Distortion in 1300 nm of Photonics Technology Letters, Vol. 7, No. 3, Page	Gain-Clamped MQW Laser A es 284-286, March 1995.	mplifiers," IEEE					
			van Roijen, R., van der Heijden, M.M., Tiemeijer, L.F., Thijs, P.J.A., van Dongen, T., Binsma, J.J.M., and Verbeek, B.H., "Over 15 dB Gain from a Monolithically Integrated Optical Switch with an Amplifier," IEEE Photonics Technology Letters, Vol. 5, No. 5, Pages 529-531, May 1993.							
	F	Q1	oshimoto, N., Magari, K., Ito, T., Kawaguchi, Y., Kishi, K., Kondo, Y., Kadota, Y., Mitomi, O., oshikuni, Y., Hasumi, Y., Tohmori, Y., and Nakajima O., "Spot-Size Converted Polarization-Insensitive OA Gate with a Vertical Tapered Submicrometer Stripe Structure," IEEE Photonics Technology etters, Vol. 10, No. 4, Pages 510-512, April 4, 1998.							
XAMINE	R		DATE CO	NSIDERED \$/27/10	P					
XAMINE	R: Initia	l if refere	ences considered, whether or not citation is in conformance with MPEP							
nclude co	py of thi	s form w	ith next communication to applicant.	•						

		_		T			heet <u>1</u> of <u>1</u>
FORM PTO-1449 (REV 878)	tent and Tradema	OF COMMERCE ark Office	Attorney's Docket No. Serial No. 21153-05927 10/020,5			020,558_	
O INFORM	ATION DISCLOS	URE CITA	TION	Applicant	Sol P. DiJa	ili et al.	
APR 0 5 ZODE	essary)		Filing Date December 14, 2001		Group Art Unit		
Till mount		U.S. PA	TENT DOC	UMENTS			
Examiner initial	Document Number	Date		Name	Class	Subclass	Filing Date If Appropriate
pr	5,748,653	05-05-98	Pá	arker et al.	372	8	
		COPY OF F	APERS				
		ORIGINALL	Y FILED				
				,			
<u>.</u>	F	OREIGN	PATENT D	OCUMENTS			
	Document Number	Date	Country	Class .	Subclass	Translation	
							Yes No
· <u> </u>							
· · · · · · · · · · · · · · · · · · ·	OTHER DOCU	IMENIS (I	ncluding Author	, Title, Date, Pertin	ent Pages, Etc	:.)	1-17-0-
		-					
		<u> </u>	-				
	6					<u>-</u>	·
EXAMINER			DATE C	ONSIDERED 8/2	7/0 4	0	
	ences considered, whether or no ith next communication to applic		formance with MPEI	§ 609; Draw line throug	th citation if not in o	conformance ar	nd not considered.

<u> </u>							S	heet <u>1</u>	_of_1	
FORM PTO-1449 (RFVP6-89)		Pa	S. DEPARTMENT O atent and Trademark	k Office	Attomey's Docket No. 21153-059		Serial No. 10/020,558			
ସ	"	ATION DISCLOSI	URE CITAT	ION	Applicants	Sol P. Di				
ة 1 1 2004 مَا يُخير		(Use several sheets if nece	ssary)		Filing Date December 14, 2001 Group Art Unit -2811 - 2828					
TURNELLA PAR			U.S. PAT	TENT DOC					2020	
Examiner initial		Document Number	Date		Name	Class	Subclass	Filing C		
PN	R1	5,805,322	09-08-98	•	Tomofuji	359	177	7.	P11	
	S1	5,778,132	07-07-98	Csi	pkes, et al.	385	135		<u>:</u>	
	T1	5,754,571	05-19-98	En	doh, et al.	372	20	•		
V	U1	5,604,628	02-18-97	Pa	rker, et al.	359	344	•		
·							†			
								,		
			FOREIGN F	PATENT D	OCUMENTS	·				
	. !	Document Number	Date	•	Country	Class	Subclass	Transi	ation	
	•	·	+	•		1		Yes	No	
			+							
			 			 				
					•	 	 	- · ·		
			1			 		-		
		OTHER DOCI	JMENTS (In	icluding Author	r, Title, Date, Pertiner	nt Pages, Fto	<u></u> ~ \			
PN	V1	Walker, J.D., Patterso Cavity Lasing Semico Laboratory, Livermore	on, F.G., Dijaili, Inductor Optica	i, S.P. and De	eri R.J., "A Gain-Cla	amped, Cro	sstalk Free	, Vertica re Natio	al nal	
<u> </u>					· · · · · · · · · · · · · · · · · · ·					
EXAMINER		4-	·	DATE C	ONGINEDED 1	 /				
	al if refer	ences considered, whether or no	ot situation is in confe		ONSIDERED /C	2// 05	f			
<u></u>		ith next communication to applic	A CIEDAN IO III COMO	JINGING WILLING CA		2020 DO 10 DOI 10 C	WALLEY OF THE PARTY OF THE PART	d not conci.	dered i	